

MOUNT MITCHELL STATE PARK PARK PROFILE

PARK PURPOSE STATEMENT

Concerned citizens, led by Governor Locke Craig, urged that Mount Mitchell be protected from the massive logging operations that had damaged much of the Black Mountain range. In response to this concern, the General Assembly passed legislation in 1915 authorizing the purchase of the summit, and a year later Mount Mitchell became North Carolina's first state park. The legislation cited Mount Mitchell's altitude, scenic beauty, importance to water quality, recreational value, forest resources and the threats to the mountain as justification for its purchase.

Mount Mitchell offers scenic panoramas of mountain peaks, forests, clouds, rolling ridges and fertile valleys. On clear days, views of up to 100 miles enable visitors to see prominent geographical features in North Carolina and other states. Dramatic climate changes and extreme weather conditions at this high elevation allow visitors to experience the forces of nature first-hand.

The park's high elevation creates local climatic conditions like those found in Canada. Snowfall averages about 104 inches per year, with snow falling in every month of the year. These cold and wet conditions support biological resources that are unusual in North Carolina. The high-elevation plant communities in Mount Mitchell State Park include Fraser Fir Forest, Red Spruce-Fraser Fir Forest and High Elevation Rocky Summit. Twenty-five special plant species are known from these communities, including mountain paper birch (*Betula papyrifera* var. *cordifolia*), Cain's reedgrass (*Calamagrostis cainii*), wretched sedge (*Carex misera*), spreading avens (*Geum radiatum*), fir clubmoss (*Huperzia selago*) and white mandarin (*Streptopus amplexifolius*). In addition, 21 uncommon animal species are listed, including the peregrine falcon (*Falco peregrinus*), Carolina northern flying squirrel (*Glaucmys sabrinus coloratus*), southern rock vole (*Microtus chrotorrhinus carolinensis*), New England cottontail (*Sylvilagus transitionalis*) and numerous invertebrates.

Mount Mitchell is a nationally significant geological resource. It lies in the crest of the Black Mountains, whose lofty and rugged peaks have been time-worn by wind, water and the forces of nature to rounded, more subdued profiles. Erosion-resistant metamorphic rocks—gneiss and schist—have allowed Mount Mitchell to retain its dramatic height of 6,684 feet, making it the highest peak in the United States east of the Mississippi River.

Mount Mitchell State Park has fully developed recreational facilities providing a combination of day-use and limited overnight recreational opportunities. These include enjoying magnificent vistas, nature study enhanced by park interpretive programs, hiking, picnicking, limited camping and winter sports. In addition to serving as a destination point for visitors from near and far, Mount Mitchell also serves as a trailhead for hikers using the extensive trail system on adjoining U.S. Forest Service lands.

Historical evidence of earlier uses of the park can be seen in the old railroad beds and remnants of logging and Civilian Conservation Corps' camps. Thirty-six buildings, located about a mile south of Mount Mitchell's summit, housed up to 200 workers as part of CCC operations from 1936 to 1941.

Mount Mitchell State Park exists primarily because of its important scenic, biological and geological values. The Division of Parks and Recreation is charged with preserving these and other values and providing park experiences that promote pride in and understanding of North Carolina's natural heritage.

PRIMARY INTERPRETIVE THEMES

Mountain Building: This geological theme explores the formation of the highest mountain range in eastern North America. The story of the formation of the Southern Appalachians through structural disturbance of the earth's crust is depicted, along with the nature of present-day landform features.

Death on Mount Mitchell: This theme includes explanations of how weather, soils, plants, animals and air pollution interact. It answers a frequently-asked park visitor question: What is happening to the trees? Scientists are yet to determine exactly what is responsible for the massive dying of Mount Mitchell's Fraser fir and red spruce trees. Natural causes include ice storms, the age of the trees, high winds, insect damage and drought, but natural factors alone are not sufficient explanation. Research indicates a correlation between air pollution and forest decline. In fact, every four out of five days, Mount Mitchell is covered in clouds and fog, sometimes as acidic as vinegar. Subjected to such pollution, a healthy tree becomes weak and is unable to fight off natural stresses it could otherwise resist.

Islands in the Sky: This biologic theme focuses on the unique plant and animal communities associated with elevations over 5,500 feet. The spruce-fir coniferous forests on these high southern Appalachian Mountains form isolated and disjunct biological communities—*islands in the sky*—that resemble those of southern Canadian communities.

STATISTICS

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| Visitation (1998) | 492,581 |
| Operating Budget (FY 98-99) | \$ 470,372 |
| Revenue (FY 98-99) | \$ 151,149 |

VISITOR FACILITIES

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|---|-----------------|
| Primitive camping (9 sites) | Visitor center |
| Picnic area (2 shelters, 40 tables with grills) | Exhibit hall |
| 6 Hiking trails (11 miles total) | Concession area |

CONSTRUCTION AND RENOVATIONS NEEDS

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| 1 | The lookout tower and access trail improvements project will provide much needed structural repairs to the tower, reworking of tower drainage, new exhibits and a reworked handicapped-accessible Summit Trail connecting the tower and parking lot. | \$ 565,188 |
| 2 | The Deep Gap trail improvements project will complete construction renovation to existing trails. | 161,326 |
| 3 | The miscellaneous building repairs project will provide ADA accessible restrooms, replace furnaces and the sewer system in the restaurant and regrade and stabilize the barracks yard area. | 297,879 |
| 4 | The ranger residences project will renovate the 3 existing residences and expand them to 3-bedroom, 2-bath residences. | 580,061 |

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| 5 | The maintenance area improvements project will repair broken concrete on the entire outer foundation apron, construct a building wing of 1200 sq. ft. including a hydraulic vehicle lift and relocate fuel tanks. | 298,835 |
| TOTAL: | | <hr/> \$ 1,903,289 |

REGISTERED NATURAL HERITAGE AREA

Mount Mitchell Registered Natural Heritage Area: This area covers 1,395 acres and includes Mount Mitchell—the highest peak east of the Mississippi River (6,684 feet)—and four other peaks over 6,500 feet. On clear days, the highest peaks offer unsurpassed vistas of the Black Mountains and the nearby Blue Ridge Mountains. Situated along the crest of the Black Mountains, these high Southern Appalachian peaks contrast sharply with others farther north by supporting many cold weather animal and plant communities that possess an affinity for alpine environments. Many of these species are restricted to the highest peaks, and the park supports disjunct examples of ecosystems more commonly associated with southern Canada. Numerous plant and animal species uncommon to North Carolina occur in this area, and the park supports the state's best developed examples of Fraser Fir Forest. Severe climate and strong winds combine to stunt tree growth and contribute to the production of unusual "fir waves", formed by dwarfed yellow birch and wind-thrown fir trees.

POTENTIAL ADDITIONS TO THE REGISTERED NATURAL HERITAGE AREA

If the privately owned land on the south end of the park near Mount Gibbs and Clingman's Peak is acquired, then those areas may be eligible for inclusion in the Registered Natural Heritage Area. A number of sensitive species, such as Roan rattlesnake root, are already known to exist in this area, and more are likely to be found with additional inventory.

BIOSPHERE RESERVE

Mount Mitchell State Park received certification as a United Nations biosphere reserve on May 12, 1993, joining an international network of more than 250 biosphere reserves. The Man and the Biosphere program was established by the United Nations Education, Scientific and Cultural Organization (UNESCO) in 1970. Its objective is to develop a scientific basis linking the natural and social sciences for the conservation of the biosphere and to improve the relationship of humans and their environment.

Biosphere reserve units are unique resources typically shielded from the influence of development. Each provides a proving ground for the ecological research and monitoring as well as standards against which the effects of man's impact on the environment can be measured.

FUTURE LAND ACQUISITION NEEDS

Completion of the Mount Mitchell State Park master plan will require the acquisition of 1,019 acres. Land acquisition objectives are to eliminate hunting access and to protect and buffer the park's natural and scenic features.

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| Master Plan Total Acreage | 2,819 acres |
| Current Park Acreage | <u>1,800 acres</u> |
| Acquisition Needs | 1,019 acres |

1999 STAFF POSITIONS

| Permanent | | Seasonal | | Peak Load | |
|-------------------------|---|------------------------------|---|-------------------------|---|
| Park Superintendent III | 1 | Park Attendant | 5 | Park Attendant | 2 |
| Park Ranger III | 1 | Refreshment Stand Manager II | 1 | Refreshment Stand Clerk | 1 |
| Park Ranger I | 2 | Refreshment Stand Clerk | 7 | Office Assistant II | 1 |
| Maintenance Mechanic IV | 1 | General Utility Worker | 1 | | |
| Maintenance Mechanic II | 1 | Naturalist | 1 | | |
| Office Assistant III | 1 | | | | |

PROPOSED STAFF ADDITIONS

| Permanent | Seasonal | Peak Load |
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